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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,572	05/01/2001	Fabrizio Loppini	GB920000073US1	4857
7590	08/26/2005		EXAMINER	
Edward H. Duffield IBM Corp, IP Law Dept T81/503 3039 Cornwallis Road PO Box 12195 Research Triangle Park, NC 27709-2195			NGUYEN, LE V	
			ART UNIT	PAPER NUMBER
			2174	
DATE MAILED: 08/26/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/846,572	LOPPINI ET AL.
	Examiner	Art Unit
	Le Nguyen	2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 June 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,3-12 and 14-22 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,3-12 and 14-22 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

1. This communication is responsive to an amendment filed 6/8/05.
2. Claims 1, 3-12 and 14-22 are pending in this application. Claims 1 and 12 are independent claims. Claims 2 and 13 have been cancelled; and, claims 1 and 12 have been amended. This action is made Final.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. Claims 1, 3, 7-12, 14 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goh in view of Gallo et al. ("Gallo"), and further in view of Tanaka et al. ("Tanaka").

As per claim 1, Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint, the system comprising means for depicting a desktop which conceptually provides a three-dimensional surface for the icons, in which the three dimensional surface is represented on a two-dimensional display device with the icons are oriented to be facing the user viewpoint and means for supporting navigation of the desktop by simulating a rotation of the desktop in three-dimensional space with the location of the icons corresponding to their respective positions to other icons (Goh: Abstract; figs. 5-6; *described and depicted is a three-dimensional workspace with real-time rotation with the icons oriented to be facing the user*). Goh further teaches means

for calculating a viewing distance for each of the plurality of icons based on the apparent distance and the location of the icon on the three-dimensional surface and means for scaling the size of each of the plurality of icons by the relevant viewing distance (Goh: figs. 5-6; col. 6, lines 29-32; *users control viewpoint, e.g. as can be seen from the comparison between figs. 5 and 6, icons are scaled according to users' viewpoint*).

Goh does not explicitly disclose the surface to be a smooth, rounded surface with those icons on portions of the surface facing away from the desktop not being displayed. Gallo teaches displaying a plurality of icons to a selected user viewpoint wherein the icons are oriented to be facing the user viewpoint and corresponding to their respective positions on a *smooth, rounded* surface with those icons on portions of the surface facing away from the desktop not being displayed (Gallo: figs. 1, 5 and 9; col. 6, lines 18-39; col. 7, lines 25-27; col. 11, lines 32-47). Therefore, it would have been obvious to an artisan at the time of the invention to include Gallo's teaching of displaying a plurality of icons to a selected user viewpoint wherein the icons are oriented to be facing the user viewpoint and corresponding to their respective positions on a smooth, rounded surface with those icons on portions of the surface facing away from the desktop not being displayed to Goh's teaching of displaying a plurality of icons wherein the icons are oriented to be facing the user and simulating a rotation in a three dimensional surface with the location of the icons corresponding to their respective positions to other icons in order to provide users with a maximal number of visible portals that lends itself well to rotation upon any axis without clutter.

However, Goh and Gallo still do not explicitly disclose the icons being oriented to be facing the user viewpoint *irrespective of position on the surface without distortion*. Tanaka teaches a GUI system for displaying a plurality of icons to a selected user viewpoint, the system comprising icons being oriented to be facing the user viewpoint irrespective of position on the surface without distortion (fig. 20; col. 17, line 64 through col. 18, line 6; *displayed are multiple icons 192-194 on an orbit in virtual space wherein icons positioned farther away from the point of view are displayed smaller on the screen, e.g. icons 193 and 194 are displayed smaller than icon 192*). Therefore, it would have been obvious to an artisan at the time of the invention to include Tanaka's teaching of icons being oriented to be facing the user viewpoint irrespective of position on the surface without distortion to Goh and Gallo's teaching of icons are oriented to be facing the user viewpoint in order to provide an additional user's point of view in virtual space as a solution to displaying a maximum number of image objects within a limited space.

As per claim 3, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint comprising means for changing the apparent distance between the viewpoint and the desktop (Goh: figs 5-6; *desktop 500 of fig. 5 is viewed from a closer distance than desktop 500 of fig. 6*).

As per claim 7, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which an icon is initially added to the center of the desktop by default (Goh: col. 6, lines 20-21).

As per claim 8, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the means for supporting navigation is responsive to dragging the desktop with a pointing device in order to rotate the desktop (Goh: col. 6, lines 35-37).

As per claim 9, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the a means for supporting navigation that is responsive to dragging an icon beyond the desktop with a pointing device in order to rotate the desktop (Goh: col. 6, lines 35-37; *desktop is rotated via axes icon(s)*).

As per claim 10, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the plurality of icons are grouped automatically according to pre-determined criteria (Goh: col. 6, lines 20-21).

As per claim 11, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the three-dimensional the three-dimensional surface is (Gallo: figs. 1, 10 and 11; col. 6, lines 18-39).

Claim 12 is similar in scope to claim 2 and is therefore rejected under similar rationale.

Claim 14 is similar in scope to claim 3 and is therefore rejected under similar rationale.

Claim 18 is similar in scope to claim 7 and is therefore rejected under similar rationale.

Claim 19 is similar in scope to claim 8 and is therefore rejected under similar rationale.

Claim 20 is similar in scope to claim 9 and is therefore rejected under similar rationale.

Claim 21 is similar in scope to claim 10 and is therefore rejected under similar rationale.

Claim 22 is similar in scope to claim 11 and is therefore rejected under similar rationale.

5. Claim 4-6 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goh (US 5,678,015) in view of Gallo et al. ("Gallo"), and further in view of Tanaka et al. ("Tanaka").

As per claim 4, although the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint comprising a means for storing the position of each of the plurality of icons, in which the position is stored as a two-dimensional co-ordinate relative to the display device (Goh: col. 6, lines 25-28; col. 6, line 63 through col. 7, line 7; col. 9, line 43 through col. 8, line 13), the modified Goh does not explicitly disclose storing the position of each of the plurality of icons in an array. Official Notice is taken that the use of storing data values, such as the position of an icon, in an array is well known in the art and considered to be fundamental to data structures, and, in turn, a major fundamental of computer programming. Therefore, it would have been obvious to an artisan at the time of the invention to include storing the position of each of the plurality of icons in an array of a GUI system for displaying a plurality of icons to the modified Goh's means for storing the position of each of the

plurality of icons so that data values of the same type may be referenced by a singular array name.

As per claim 5, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the means for supporting navigation comprises a means for determining a new two-dimensional co-ordinate for each of the plurality of icons following rotation of the desktop and a means for updating the array accordingly (Goh: col. 6, lines 3-28).

As per claim 6, the modified Goh teaches a GUI system for displaying a plurality of icons to a selected user viewpoint in which the means for determining comprises a means for transforming the two-dimensional co-ordinate of each of the plurality of icons into a three-dimensional co-ordinate, a means for changing the three-dimensional co-ordinates based on the rotation of the desktop and a means for transforming the changed three-dimensional co-ordinates into a new two-dimensional co-ordinate for each of the plurality of icons (Goh: col. 6, lines 3-42).

Claim 15 is similar in scope to claim 4 and is therefore rejected under similar rationale.

Claim 16 is similar in scope to claim 5 and is therefore rejected under similar rationale.

Claim 17 is similar in scope to claim 6 and is therefore rejected under similar rationale.

Response to Arguments

6. Applicant's arguments filed 6/8/05 have been fully considered but they are not persuasive.

Applicant argued the following:

(a) The primary class for Tanaka is 463, which relates to games and the like.

What would suggest there are deficiencies with the Goh and Gallo teachings relating to desktops and cause a skilled artisan to look to a game command teaching to improve selection of desktop icons?

(b) Piecing together of elements from three references to produce the combination proposed in the Office Action is not reasonably suggested to the skilled artisan.

(c) Without Applicant's teaching, why look further than Goh or Gallo?

The examiner disagrees for the following reasons:

Per (a), in response to applicant's argument that Tanaka is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, one of the classes listed as pertinent to Tanaka may be in the games area (class 463); however, similar to Goh and Gallo, Tanaka is also listed under class 715 due to its relevance to the GUI area and, in particular, having subject matter drawn to "on-screen window list or index" in accordance with subclass 783 and the

class schedule for class 715. Furthermore, all three references' subclasses (Goh's class 715/subclass 782, Gallo's class 715/subclass 805 and Tanaka's class 715/subclass 783) are further indented under the singular subclass "Window or viewpoint", subclass 781, thereby, further establishing that they are indeed analogous art.

Per (b), in response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991). And, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine or modify the teachings of the prior art to produce the claimed invention was found in the reference (Tanaka: col. 1, lines 55-67).

Per (c), in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does

not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiries

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lê Nguyen whose telephone number is (571) 272-4068. The examiner can normally be reached on Monday - Friday from 7:00 am to 3:30 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached on (703) 308-0640.

The fax numbers for the organization where this application or proceeding is assigned are as follows:

(703) 872-9306 [Official Communication]

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

LVN
Patent Examiner
August 13, 2005

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100